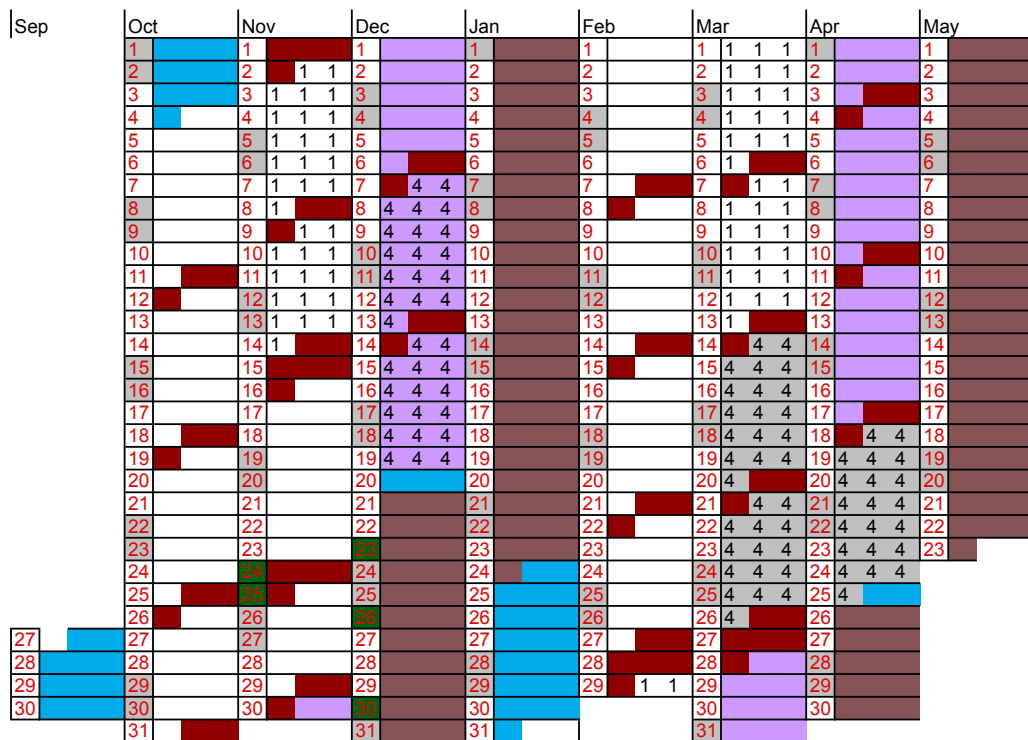


APS Long-Range Operations Schedule

Run 2011-3

Run 2012-1



User Operation in standard lattice
 User Operation in Reduced Horizontal Lattice(RHB)

SOM Periods
 1 Hybrid Fill - (singlet)
 4 324 Singlets - Non Top-Up
 4 324 Singlets RHB - Non Top-Up

Machine Studies
 Maintenance
 Shifts set aside for Studies/ Machines Intervention as Needed

Weekends
 Lab Holidays

Top-Up Operations is standard unless indicated in fill pattern

Fill pattern is 24 singlets unless otherwise indicated by number

Breakdown of User Shifts by Fill Pattern

Number of 8-hour User Shifts

| | 24 Singlets - Top-Up | Hybrid Fill - Top-Up | 324 Singlets - Non Top-Up | Total Shifts | Total Hours |
|--------|----------------------|----------------------|---------------------------|--------------|-------------|
| 2011-3 | 125 | 33 | 35 | 193 | 1544 |
| 2012-1 | 126 | 36 | 54 | 216 | 1728 |
| SUM | 251 | 69 | 89 | 409 | 3272 |